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Docket No.: 1248-0694P
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Keiichi TANAKA et al.

Application No.: 10/779,795

Confirmation No.: 9620

Filed: February 18, 2004

Art Unit: 1756

For: MANUFACTURING METHOD OF
COMPOSITE FILM, COMPOSITE FILM,
COLOR FILTER MADE OF COMPOSITE
FILM, DISPLAY APPARATUS PROVIDED
WITH COLOR FILTER

Examiner: N. M. Barreca

LETTER

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicants filed an Appeal Brief on November 27, 2006, in which had minor typographical error in the page header. Please substitute this corrected Appeal Brief for the incorrect one previously submitted with the on November 27, 2006.

Applicants respectfully submit that the current Appeal brief raises no new issues, requires no new search by the Examiner, and requires no more than a cursory review by the Examiner. Further, this submission does not involve materially adding work on the part of the Office. The only change that was made was in the page header of Appendix IX., X., and XI., which listed the incorrect application number and attorney docket number.

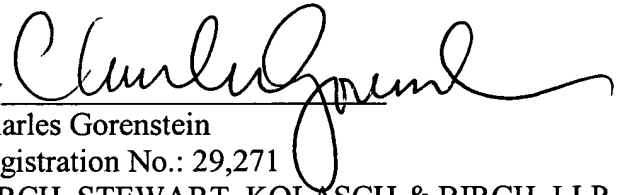
If the Examiner has any questions concerning this application, the Examiner is requested to contact Catherine M. Voisinnet, Reg. No. 52,327 at the telephone number below. Facsimile communications may be sent to facsimile number (703) 205-8050.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Dated: December 21, 2006

Respectfully submitted,

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MS APPEAL BRIEF
PATENT
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IN THE U.S. PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF

BEFORE THE BOARD OF APPEALS

Keiichi TANAKA et al.

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EXAMINER: KATHLEEN DUDA

FOR: MANUFACTURING METHOD OF COMPOSITE FILM, COMPOSITE FILM,
COLOR FILTER MADE OF COMPOSITE FILM, DISPLAY APARATUS
PROVIDED WITH COLOR FILTER

APPEAL BRIEF

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COLOR FILTER MADE OF COMPOSITE FILM, DISPLAY APARATUS
PROVIDED WITH COLOR FILTER

APPEAL BRIEF ON BEHALF OF APPELLANTS: Keiichi TANAKA et al.

MS APPEAL BRIEF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DUE: November 27, 2006

Sir:

This appeal is from the decision of the Examiner dated February 2, 2006, finally rejecting claims 1-10 which are reproduced as an Appendix to this Brief.

The Commissioner is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17, and 1.21 that may be required by this paper and to credit any overpayment to Deposit Account No. 02-2448.

I. REAL PARTY IN INTEREST

The real party in interest for this application is the Assignee, Sharp Kabushiki Kaisha, 22-22 Nagaïke-cho, Abeno-ku, Osaka-shi, Osaka, 545-8522 Japan.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences that will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III. STATUS OF CLAIMS

Claim 1-46 are pending in this application. Claims 11-46 are withdrawn from consideration. Claims 1-10 are finally rejected and the subject of the present appeal. Claim 1 is independent.

IV. STATUS OF AMENDMENTS

No amendments have been presented after the Final Rejection of February 2, 2006.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

The invention of claim 1 is directed to a method of manufacturing a composite film including a first film 12 and a second film 17, the first film having a plurality of partition sections 12a extending generally along one direction, facing each other with a gap region [Specification, page 28, lines 1-11] therebetween, and the second film being located in the gap region, the method comprising the steps of forming the first film on a substrate [Specification,

page 30, lines 6-12]; and applying a second film material in the gap region by an ink-jet method by traversing an ink jet with respect to the substrate generally along the one direction in which the partition sections are extended [Specification, page 31, line 23 through page 32, line 6; and curing the second film material thus applied, so as to form the second film [Specification, page 32, lines 6-12], the first film comprising at least one gap width regulating section 12b, by which a width of the gap region is narrowed in the one direction [Specification, page 28, lines 12-22].

The summary of the claimed invention herein is being made to comply with the Patent Office Rules in submitting Briefs and is not to be considered as limiting the claimed invention.

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

The Final Office Action provides three (3) grounds of rejection for review on appeal.

- 1) Claims 1-9 stand rejected under 35 U.S.C. § 102(b) as being anticipated by *Matsuyama* (U.S. Patent Application Publication No. 2001/0007733) (hereinafter “*Matsuyama*”);
- 2) Claims 1-3 and 6-10 stand rejected under 35 U.S.C. § 102(e) as being anticipated by *Kiguchi* (U.S. Patent Application Publication No. 2003/0210361) (hereinafter “*Kiguchi*”); and
- 3) Claim 10 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Matsuyama* in view of *Nishida* (USP 6,864,034) (hereinafter “*Nishida*”).

VII. **ARGUMENTS**

Appellants will demonstrate that the claims are all distinguishable from the cited prior art of record.

A. **The Examiner has Failed to Establish *Prima Facie* Anticipation in Support of the Rejection of Claims 1-9 Based on the Teachings of *Matsuyama***

1. **Argument Summary**

The reasoning provided in support of the rejection of claims 1-9 under 35 U.S.C. § 102(b) as being anticipated by *Matsuyama* fails to establish *prima facie* anticipation. Generally, the deficiencies of the rejection are that the rejection attributes certain claimed features to *Matsuyama* that a detailed reading of the reference reveals are not taught therein. Further, the Examiner has failed to consider any of the elements recited in any of the dependent claims. These deficiencies exist for the rejection of each of claims 1-9.

2. **Legal Requirements of *Prima Facie* Anticipation**

In order to properly anticipate Appellant's claimed invention under 35 U.S.C. § 102(b), each and every element of the claim in issue must be found, either expressly described or under the principles of inherency, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the . . . claims." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913 (Fed. Cir. 1989). Finally, the elements must be arranged as required by the claims, but this is not an *ipsissimis verbis* test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

3. **The Rejection Fails to Establish *Prima Facie* Anticipation of Independent Claim 1**

Independent claim 1 is directed to a method of manufacturing a composite film including a first film and a second film, the first film having a plurality of partition sections extending generally along one direction, facing each other with a gap region therebetween, and the second film being located in the gap region, the method comprising the steps of forming the first film on a substrate; and applying a second film material in the gap region by an ink-jet method by traversing an ink jet with respect to the substrate generally along the one direction in which the partition sections are extended, and curing the second film material thus applied, so as to form the second film, the first film comprising at least one gap width regulating section, by which a width of the gap region is narrowed in the one direction.

In maintaining her rejection of independent claim 1, the Examiner asserts in the Final Official Action mailed February 2, 2006, on pages 2-3, as follows:

A color filter is manufactured. On the main surface of substrate SUB2 the pattern of the black matrix (BM) is formed, corresponding to a first film. As can be seen in Figure 11(a) the first film is tapered and therefore includes a gap width regulating section by which the width of the gap region is narrowed. A photosensitive resin is coated and exposed through the substrate to UV radiation using the first film as a mask. This formed dyed substrate layer DP whose height is lower than the height of the GM. Ink ®, INK (G), INK (B) is supplied to the ink reservoirs POD by an ink jet method, corresponding to the second film material. Ink is raised on the dyed substrate layer making use of the surface tension of the ink. This is realized by using the GM as partition walls and making the height of the DP lower. The ink is diffused into the dyed substrate layers DP by a suitable heat treatment. See specifically [0159]-[0169] and Figures 11(a)-12(d).

Appellants disagree that *Mastuyama* discloses the first film comprising at least one gap width regulating section, by which a width of the gap region is narrowed in the one direction.

A. The Examiner has failed to properly consider all of the elements recited in claim 1

As noted above, claim 1 recites a method of manufacturing a composite film including a first film and a second film, the first film having a plurality of partition sections extending generally along one direction, facing each other with a gap region therebetween, and the second film being located in the gap region, the method comprising the steps of so as to form the second film, the first film comprising at least one gap width regulating section, by which a width of the gap region is narrowed **in the one direction**.

In rejecting claim 1, the Examiner fails to consider and/or address that portion of the claim that indicates that the width of the gap region is narrowed in the one direction.

As the Examiner has failed to consider all of the claim elements as recited in the claim, Appellants maintain that the Examiner has failed to establish *prima facie* anticipation under 35 U.S.C. § 102.

B. The Examiner has failed to provide a reference that teaches or suggests “at least one gap width regulating section, by which a width of the gap region is narrowed in the one direction,” as recited in claim 1

The disclosure of *Matsuyama* is directed to a method of manufacturing color filters and liquid crystal display device using the color filters. As depicted Fig. 11A, the pattern of the black matrix is formed using a black resist (BM). The partition portion tapers in as it extends from the

bottom to the top of the gap. The Examiner appears to be interpreting the claim language to read on the teachings of *Matsuyama* depicted in Fig. 11A as the gap narrows from the top of the gap to the bottom of the gap.

However, claim 1 clearly recites a method of manufacturing a composite film including a first film and a second film, the first film having **a plurality of partition sections extending generally along one direction**, facing each other with a gap region therebetween, and the second film being located in the gap region, the method comprising applying a second film material in the gap region by an ink-jet method by traversing an ink jet with respect to the substrate generally along the one direction in which the partition sections are extended, and curing the second film material thus applied, so as to form the second film, the first film comprising **at least one gap width regulating section, by which a width of the gap region is narrowed in the one direction**.

There is no teaching or suggestion in *Matsuyama* that is directed to a method of manufacturing a composite film, the first film having a plurality of partition sections extending generally along one direction, the first film comprising at least one gap with regulating section, by which a width of the gap region is narrowed in the one direction. As *Matsuyama* fails to teach or suggest all of the claim elements, Appellants maintain that the Examiner has failed to establish *prima facie* anticipation by failing to provide a reference that teaches or suggests all of the claim elements.

C. The Examiner reliance on the teaching of one element of the reference to teach two elements as recited in claim 1 is improper

The figures cited by the Examiner do not show the at least gap width regulating section as claimed. The Examiner relies on the tapered portion of the partitioned sections to teach the gap width regulating section. In other words, the Examiner appears to rely on the partition section of *Matsuyama* to teach both the partition section and the gap width regulating section. Appellants maintain that this interpretation is wholly improper. The claim clearly recites having partition sections and width regulating sections. The Examiner's reliance solely on the tapered partition to teach both of these claim elements is improper. As *Matsuyama* fails to teach or suggest all of the claimed elements Appellants maintain that the Examiner has failed to establish *prima facie* anticipation.

4. The Rejection Fails to Establish *Prima Facie* Anticipation of Dependent Claim 2

Dependent claim 2 is directed to the method as set forth in claim 1 wherein the gap width regulating section comprises a part of a partition section which extends into the gap region.

In the outstanding Official Action, the Examiner fails to provide any explanation whatsoever, either in the form of citations to the teachings of the cited reference, or any statement regarding how the teachings of the cited reference anticipate the claim elements, in support of the rejection. The Examiner fails to address this claim in any manner, other than to indicate that the claim is summarily rejected.

As the Examiner has failed to address any of the elements recited in the claim, Appellants maintain that the Examiner has failed to establish *prima facie* anticipation.

5. The Rejection Fails to Establish *Prima Facie* Anticipation of Dependent Claim 3

Dependent claim 3 is directed to the method as set forth in Claim 1, wherein the gap width regulating section comprises a portion of the first film which is separate from any partition section.

In the outstanding Official Action, the Examiner fails to provide any explanation whatsoever, either in the form of citations to the teachings of the cited reference, or any statement regarding how the teachings of the cited reference anticipate the claim elements, in support of the rejection. The Examiner fails to address this claim in any manner, other than to indicate that the claim is summarily rejected.

As the Examiner has failed to address any of the elements recited in the claim, Appellants maintain that the Examiner has failed to establish *prima facie* anticipation.

6. The Rejection Fails to Establish *Prima Facie* Anticipation of Dependent Claim 4

Dependent claim 4 is directed to the method as set forth in Claim 1, wherein the gap width regulating section has a corner and said corner is rounded.

In the outstanding Official Action, the Examiner fails to provide any explanation whatsoever, either in the form of citations to the teachings of the cited reference, or any statement

regarding how the teachings of the cited reference anticipate the claim elements, in support of the rejection. The Examiner fails to address this claim in any manner, other than to indicate that the claim is summarily rejected.

As the Examiner has failed to address any of the elements recited in the claim, Appellants maintain that the Examiner has failed to establish *prima facie* anticipation.

7. The Rejection Fails to Establish *Prima Facie* Anticipation of Dependent Claim 5

Dependent claim 5 is directed to the method as set forth in Claim 1, wherein all corner portions of said partition sections and of said gap width regulating sections are rounded.

In the outstanding Official Action, the Examiner fails to provide any explanation whatsoever, either in the form of citations to the teachings of the cited reference, or any statement regarding how the teachings of the cited reference anticipate the claim elements, in support of the rejection. The Examiner fails to address this claim in any manner, other than to indicate that the claim is summarily rejected.

As the Examiner has failed to address any of the elements recited in the claim, Appellants maintain that the Examiner has failed to establish *prima facie* anticipation.

8. The Rejection Fails to Establish *Prima Facie* Anticipation of Dependent Claim 6

Dependent claim 6 is directed to the method as set forth in Claim 1, wherein the first film comprises a plurality of gap width regulating sections spaced along said one direction, the gap width regulating sections located in end parts of the gap region causing the width of the gap

region to be narrower than the gap width regulating sections located in a middle part of the gap region.

In the outstanding Official Action, the Examiner fails to provide any explanation whatsoever, either in the form of citations to the teachings of the cited reference, or any statement regarding how the teachings of the cited reference anticipate the claim elements, in support of the rejection. The Examiner fails to address this claim in any manner, other than to indicate that the claim is summarily rejected.

As the Examiner has failed to address any of the elements recited in the claim, Appellants maintain that the Examiner has failed to establish *prima facie* anticipation.

9. The Rejection Fails to Establish *Prima Facie* Anticipation of Dependent Claim 7

Dependent claim 7 is directed to the method as set forth in Claim 1, wherein the gap width regulating sections positioned in one end part of the gap region cause the width of the gap region to be narrower than the gap width regulating sections positioned in another end part, and wherein the step of applying the film material comprises applying said film material in a direction beginning from the other end part toward the one end part.

In the outstanding Official Action, the Examiner fails to provide any explanation whatsoever, either in the form of citations to the teachings of the cited reference, or any statement regarding how the teachings of the cited reference anticipate the claim elements, in support of the rejection. The Examiner fails to address this claim in any manner, other than to indicate that the claim is summarily rejected.

As the Examiner has failed to address any of the elements recited in the claim, Appellants maintain that the Examiner has failed to establish *prima facie* anticipation.

10. The Rejection Fails to Establish *Prima Facie* Anticipation of Dependent Claim 8

Dependent claim 8 is directed to the method as set forth in Claim 1, comprising, prior to the step of applying the second film material in the gap region, the steps of forming a photosensitive film on the substrate on which the first film has been formed, the photosensitive film being of a type which may be rendered more wettable with respect to the second film material by radiating specific light onto the photosensitive film; and radiating the specific light onto the photosensitive film to cause that part of the photosensitive film which corresponds to the gap region, to be relatively more wettable than the part of the photosensitive film which is on the first film.

In the outstanding Official Action, the Examiner fails to provide any explanation whatsoever, either in the form of citations to the teachings of the cited reference, or any statement regarding how the teachings of the cited reference anticipate the claim elements, in support of the rejection. The Examiner fails to address this claim in any manner, other than to indicate that the claim is summarily rejected.

As the Examiner has failed to address any of the elements recited in the claim, Appellants maintain that the Examiner has failed to establish *prima facie* anticipation.

11. **The Rejection Fails to Establish *Prima Facie* Anticipation of Dependent Claim 9**

Dependent claim 9 is directed to the method as set forth in Claim 8, wherein the substrate is transparent with respect to the specific light, and the first film shields the specific light, and in the step of radiating the specific light, the specific light is radiated through the substrate onto the photosensitive film, the first film serving as a mask blocking said specific light from portions of said photosensitive film.

In the outstanding Official Action, the Examiner fails to provide any explanation whatsoever, either in the form of citations to the teachings of the cited reference, or any statement regarding how the teachings of the cited reference anticipate the claim elements, in support of the rejection. The Examiner fails to address this claim in any manner, other than to indicate that the claim is summarily rejected.

As the Examiner has failed to address any of the elements recited in the claim, Appellants maintain that the Examiner has failed to establish *prima facie* anticipation.

B. **The Examiner has Failed to Establish *Prima Facie* Anticipation in Support of the Rejection of Claims 1-3 and 6-10 Based on the Teachings of *Kiguchi***

1. **Argument Summary**

The reasoning provided in support of the rejection of claims 1-3 and 6-10 under 35 U.S.C. § 102(b) as being anticipated by *Kiguchi* fails to establish *prima facie* anticipation. Generally, the deficiencies of the rejection are that the rejection attributes certain claimed features to *Kiguchi* that a detailed reading of the reference reveals are not taught therein. Further,

the Examiner has failed to consider any of the elements recited in any of the dependent claims. These deficiencies exist for the rejection of each of claims 1-3 and 6-10.

2. The Rejection Fails to Establish *Prima Facie* Anticipation of Independent Claim 1

Independent claim 1 is directed to a method of manufacturing a composite film including a first film and a second film, the first film having a plurality of partition sections extending generally along one direction, facing each other with a gap region therebetween, and the second film being located in the gap region, the method comprising the steps of forming the first film on a substrate; and applying a second film material in the gap region by an ink-jet method by traversing an ink jet with respect to the substrate generally along the one direction in which the partition sections are extended, and curing the second film material thus applied, so as to form the second film, the first film comprising at least one gap width regulating section, by which a width of the gap region is narrowed in the one direction.

In maintaining her rejection of independent claim 1, the Examiner asserts in the Final Official Action mailed February 2, 2006, on page 3, as follows:

Color filter is manufactured. Transparent substrate 2 is formed. A chromium film is formed and patterned using a photoresist exposed UV rays and etching to form shading layer (black matrix 3). Photosensitive resin film is deposited and exposed to form banks 14 which extend outward and cover the inside of the shading layer 3. Ink as a coloring material is jetted and applied to the color filter layer formation regions (pixel portions 13) from an ink jet head. Ink droplets are applied, dried and heated to form pixel portions 13 of R, G and B. See specifically [0032]-[0043] and Figure 4.

Appellants disagree that *Kiguchi* discloses the first film comprising at least one gap width regulating section, by which a width of the gap region is narrowed in the one direction.

A. The Examiner has failed to properly consider all of the elements recited in claim 1

As noted above, claim 1 recites a method of manufacturing a composite film including a first film and a second film, the first film having a plurality of partition sections extending generally along one direction, facing each other with a gap region therebetween, and the second film being located in the gap region, the method comprising the steps of so as to form the second film, the first film comprising at least one gap width regulating section, by which a width of the gap region is narrowed **in the one direction**.

In rejecting claim 1, the Examiner fails to consider and/or address that portion of the claim that indicates that the width of the gap region is narrowed in the one direction.

As the Examiner has failed to consider all of the claim elements as recited in the claim, Appellants maintain that the Examiner has failed to establish *prima facie* anticipation under 35 U.S.C. § 102.

B. The Examiner has failed to provide a reference that teaches or suggests “at least one gap width regulating section, by which a width of the gap region is narrowed in the one direction,” as recited in claim 1

The disclosure of *Kiguchi* is directed to an electro optical apparatus, its production method, devices, and electronic appliances. As can be seen in Figs. 3 and 4, the bottom of the gap between partition 14 is narrower than the top of the gap. As such, it appears that the Examiner is interpreting the claim language as similarly interpreted with regard to the *Matsuyama* rejection. However, claim 1 clearly recites the first film comprises at least one gap

with regulating section, by which a width of the gap region is narrowed in the one direction, Appellants maintain that *Kiguchi* fails to anticipate claim 1 as *Kiguchi* fails to teach or suggest at least one gap with regulating section, by which a width of the gap region is narrowed in the one direction, as required by claim 1. Appellants maintain that the Examiner has failed to establish *prima facie* anticipation by failing to provide a reference that teaches or suggests all of the claim elements.

C. The Examiner reliance on the teaching of one element of the reference to teach two elements as recited in claim 1 is improper

The figures cited by the Examiner do not show the at least gap width regulating section as claimed. The Examiner relies on the tapered portion of the partitioned sections to teach the gap width regulating section. In other words, the Examiner appears to rely on the partition section of *Kiguchi* to teach both the partition section and the gap width regulating section. Appellants maintain that this interpretation is wholly improper. The claim clearly recites having partition sections and width regulating sections. The Examiner's reliance solely on the tapered partition to teach both of these claim elements is improper. As *Kiguchi* fails to teach or suggest all of the claimed elements Appellants maintain that the Examiner has failed to establish *prima facie* anticipation.

3. **The Rejection Fails to Establish *Prima Facie* Anticipation of Dependent Claim 2**

Dependent claim 2 is directed to the method as set forth in claim 1 wherein the gap width regulating section comprises a part of a partition section which extends into the gap region.

In the outstanding Official Action, the Examiner fails to provide any explanation whatsoever, either in the form of citations to the teachings of the cited reference, or any statement regarding how the teachings of the cited reference anticipate the claim elements, in support of the rejection. The Examiner fails to address this claim in any manner, other than to indicate that the claim is summarily rejected.

As the Examiner has failed to address any of the elements recited in the claim, Appellants maintain that the Examiner has failed to establish *prima facie* anticipation.

4. **The Rejection Fails to Establish *Prima Facie* Anticipation of Dependent Claim 3**

Dependent claim 3 is directed to the method as set forth in Claim 1, wherein the gap width regulating section comprises a portion of the first film which is separate from any partition section.

In the outstanding Official Action, the Examiner fails to provide any explanation whatsoever, either in the form of citations to the teachings of the cited reference, or any statement regarding how the teachings of the cited reference anticipate the claim elements, in support of the rejection. The Examiner fails to address this claim in any manner, other than to indicate that the claim is summarily rejected.

As the Examiner has failed to address any of the elements recited in the claim, Appellants maintain that the Examiner has failed to establish *prima facie* anticipation.

5. The Rejection Fails to Establish *Prima Facie* Anticipation of Dependent Claim 6

Dependent claim 6 is directed to the method as set forth in Claim 1, wherein the first film comprises a plurality of gap width regulating sections spaced along said one direction, the gap width regulating sections located in end parts of the gap region causing the width of the gap region to be narrower than the gap width regulating sections located in a middle part of the gap region.

In the outstanding Official Action, the Examiner fails to provide any explanation whatsoever, either in the form of citations to the teachings of the cited reference, or any statement regarding how the teachings of the cited reference anticipate the claim elements, in support of the rejection. The Examiner fails to address this claim in any manner, other than to indicate that the claim is summarily rejected.

As the Examiner has failed to address any of the elements recited in the claim, Appellants maintain that the Examiner has failed to establish *prima facie* anticipation.

6. The Rejection Fails to Establish *Prima Facie* Anticipation of Dependent Claim 7

Dependent claim 7 is directed to the method as set forth in Claim 1, wherein the gap width regulating sections positioned in one end part of the gap region cause the width of the gap region to be narrower than the gap width regulating sections positioned in another end part, and

wherein the step of applying the film material comprises applying said film material in a direction beginning from the other end part toward the one end part.

In the outstanding Official Action, the Examiner fails to provide any explanation whatsoever, either in the form of citations to the teachings of the cited reference, or any statement regarding how the teachings of the cited reference anticipate the claim elements, in support of the rejection. The Examiner fails to address this claim in any manner, other than to indicate that the claim is summarily rejected.

As the Examiner has failed to address any of the elements recited in the claim, Appellants maintain that the Examiner has failed to establish *prima facie* anticipation.

7. The Rejection Fails to Establish *Prima Facie* Anticipation of Dependent Claim 8

Dependent claim 8 is directed to the method as set forth in Claim 1, comprising, prior to the step of applying the second film material in the gap region, the steps of forming a photosensitive film on the substrate on which the first film has been formed, the photosensitive film being of a type which may be rendered more wettable with respect to the second film material by radiating specific light onto the photosensitive film; and radiating the specific light onto the photosensitive film to cause that part of the photosensitive film which corresponds to the gap region, to be relatively more wettable than the part of the photosensitive film which is on the first film.

In the outstanding Official Action, the Examiner fails to provide any explanation whatsoever, either in the form of citations to the teachings of the cited reference, or any statement

regarding how the teachings of the cited reference anticipate the claim elements, in support of the rejection. The Examiner fails to address this claim in any manner, other than to indicate that the claim is summarily rejected.

As the Examiner has failed to address any of the elements recited in the claim, Appellants maintain that the Examiner has failed to establish *prima facie* anticipation.

8. The Rejection Fails to Establish *Prima Facie* Anticipation of Dependent Claim 9

Dependent claim 9 is directed to the method as set forth in Claim 8, wherein the substrate is transparent with respect to the specific light, and the first film shields the specific light, and in the step of radiating the specific light, the specific light is radiated through the substrate onto the photosensitive film, the first film serving as a mask blocking said specific light from portions of said photosensitive film.

In the outstanding Official Action, the Examiner fails to provide any explanation whatsoever, either in the form of citations to the teachings of the cited reference, or any statement regarding how the teachings of the cited reference anticipate the claim elements, in support of the rejection. The Examiner fails to address this claim in any manner, other than to indicate that the claim is summarily rejected.

As the Examiner has failed to address any of the elements recited in the claim, Appellants maintain that the Examiner has failed to establish *prima facie* anticipation.

9. **The Rejection Fails to Establish *Prima Facie* Anticipation of Dependent Claim 10**

Dependent claim 10 is directed to the method as set forth in Claim 1, wherein forming the first film on the substrate using, a thermal imaging process using a laser beam.

In the outstanding Official Action, the Examiner fails to provide any explanation whatsoever, either in the form of citations to the teachings of the cited reference, or any statement regarding how the teachings of the cited reference anticipate the claim elements, in support of the rejection. The Examiner fails to address this claim in any manner, other than to indicate that the claim is summarily rejected.

As the Examiner has failed to address any of the elements recited in the claim, Appellants maintain that the Examiner has failed to establish *prima facie* anticipation.

C. **The Examiner has Failed to Establish *Prima Facie* Obviousness in Support of the Rejection of Claim 10 Based on the Teachings of *Matsuyama* and *Nishida***

1. **Argument Summary**

The reasoning provided in support of the rejection of claim 10 under 35 U.S.C. § 103(a) as being unpatentable over *Matsuyama* in view of *Nishida* fails to establish *prima facie* obviousness. Generally, the deficiencies of the rejection are that the rejection attributes certain claimed features to the references that a detailed reading of the references reveals are not taught therein.

2. Legal Requirements of *Prima Facie* Obviousness

To establish *prima facie* obviousness, all claim limitations must be taught or suggested by the prior art and the asserted modification or combination of the prior art must be supported by some teaching, suggestion, or motivation in the applied references or in knowledge generally available to one skilled in the art. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). The prior art must suggest the desirability of the modification in order to establish a *prima facie* case of obviousness. *In re Brouwer*, 77 F.3d 422, 425, 37 USPQ2d 1663, 1666 (Fed. Cir. 1995). It can also be said that the prior art must collectively suggest or point to the claimed invention to support a finding of obviousness. *In re Hedges*, 783 F.2d 1038, 1041, 228 USPQ 685, 687 (Fed. Cir. 1986); *In re Ehrreich*, 590 F.2d 902, 908-909, 200 USPQ 504, 510 (C.C.P.A. 1979).

The teaching or suggestion to make the asserted combination or modification of the primary reference must be found in the prior art and cannot be gleaned from applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). In other words, the use of hindsight to reconstruct the claimed invention is impermissible. *Uniroyal Inc. v. Rudlan-Wiley Corp.*, 5 USPQ 1434 (Fed. Cir. 1983).

Finally, when considering the differences between the primary reference and the claimed invention, the question for assessing obviousness is not whether the differences themselves would be been obvious, but instead whether the claimed invention as a whole would have been obvious. *Stratoflex Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983).

3. **The Rejection Fails to Establish *Prima Facie* Obviousness of Dependent Claim 10**

Claim 10 depends directly from claim 1. Appellants submit that claim 10 is allowable for the reasons forth above in regard to claim 1 at least based upon its dependency on claim 1. Appellants further submit that dependent claim 10 is separately patentable and offers the following additional argument for the invention of claim 10.

The rejection of claim 10 asserts that *Nishida* discloses the features as recited therein. However, Appellant submit that the rejection's reliance on *Nishida* fails to make up for the deficiencies of the rejection as applied in claim 1. As such, *Matsuyama* taken alone or in combination with *Nishida*, fails to establish *prima facie* obviousness of dependent claim 10.

VIII. CONCLUSION

The withdrawal of the outstanding rejections and the allowance of claims 1-10 is earnestly solicited.

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Respectfully submitted,

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IX. CLAIMS APPENDIX

1. (Previously Presented) A method of manufacturing a composite film including a first film and a second film, the first film having a plurality of partition sections extending generally along one direction, facing each other with a gap region therebetween, and the second film being located in the gap region, the method comprising the steps of:

forming the first film on a substrate; and

applying a second film material in the gap region by an ink-jet method by traversing an ink jet with respect to the substrate generally along the one direction in which the partition sections are extended, and curing the second film material thus applied, so as to form the second film,

the first film comprising at least one gap width regulating section, by which a width of the gap region is narrowed in the one direction.

2. (Original) The method as set forth in Claim 1 wherein:

the gap width regulating section comprises a part of a partition section which extends into the gap region.

3. (Original) The method as set forth in Claim 1, wherein:

the gap width regulating section comprises a portion of the first film which is separate from any partition section.

4. (Original) The method as set forth in Claim 1, wherein:

the gap width regulating section has a corner and said corner is rounded.

5. (Original) The method as set forth in claim 1, wherein:

all corner portions of said partition sections and of said gap width regulating sections are rounded.

6. (Original) The method as set forth in Claim 1, wherein:

the first film comprises a plurality of gap width regulating sections spaced along said one direction,

the gap width regulating sections located in end parts of the gap region causing the width of the gap region to be narrower than the gap width regulating sections located in a middle part of the gap region.

7. (Original) The method as set forth in Claim 1, wherein:

the gap width regulating sections positioned in one end part of the gap region cause the width of the gap region to be narrower than the gap width regulating sections positioned in another end part, and

wherein the step of applying the film material comprises applying said film material in a direction beginning from the other end part toward the one end part.

8. (Original) The method as set forth in Claim 1, comprising, prior to the step of applying the second film material in the gap region, the steps of:

forming a photosensitive film on the substrate on which the first film has been formed, the photosensitive film being of a type which may be rendered more wettable with respect to the second film material by radiating specific light onto the photosensitive film; and

radiating the specific light onto the photosensitive film to cause that part of the photosensitive film which corresponds to the gap region, to be relatively more wettable than the part of the photosensitive film which is on the first film.

9. (Original) The method as set forth in Claim 8, wherein:

the substrate is transparent with respect to the specific light, and the first film shields the specific light, and

in the step of radiating the specific light, the specific light is radiated through the

substrate onto the photosensitive film, the first film serving as a mask blocking said specific light from portions of said photosensitive film.

10. (Original) The method as set forth in Claim 1, comprising:
forming the first film on the substrate using, a thermal imaging process using a laser beam.

11. (Withdrawn) A composite film, comprising:
a first film having a plurality of partition sections facing each other with a gap region therebetween; and
a second film formed by applying a second film material in the gap region by an ink-jet method,
the first film having at least one gap width regulating section, by which a width of the gap region is partially narrowed.

12. (Withdrawn) The composite film as set forth in Claim 11, wherein:
the gap width regulating section is a protrusion from one of the partition sections which protrudes into the gap region.

13. (Withdrawn) The composite film as set forth in Claim 11, wherein:
the gap width regulating section is a section of the first film separate from the partition sections.

14. (Withdrawn) The composite film as set forth in Claim 11, wherein:
the first film has a plurality of the gap width regulating sections spaced along at least one of said partitions,
wherein the gap width regulating sections located at end parts of the gap region cause the

width of the gap region to be narrower than the gap width regulating sections located in a middle part of the gap region..

15. (Withdrawn) The composite film as set forth in Claim 11, wherein:

the gap width regulating sections positioned at one end of the gap region cause the width of the gap region to be narrower than the gap width regulating sections positioned in another end part; and

the second film material is applied beginning at the other end part toward the one end part.

16. (Withdrawn) The composite film as set forth in Claim 11, further comprising:

a functional film between the first film and the second film, the functional film being controllable in terms of wetting property with respect to the second film material,

the functional film having relatively less wettable part that is on the first film, and relatively more wettable part that corresponds to the gap region.

17. (Withdrawn) The composite film as set forth in Claim 11, wherein:

the first film is formed by a thermal imaging process using a laser beam.

18. (Withdrawn) A color filter, comprising:

a light-shielding film having a plurality of partition sections extending, in one direction with a gap region therebetween; and

a transparent color film formed by applying a film material in the gap region by an ink-jet method,

the light-shielding film having a gap width regulating section which narrows the width of the gap region.

19. (Withdrawn) The color filter of claim 18, wherein said film material is cured after application.

20. (Withdrawn) A display apparatus comprising
the color filter of claim 18.

21. (Withdrawn) A display apparatus comprising:
a color filter, including:
a light-shielding film having a plurality of partition sections extending, in one direction
with a gap region therebetween, and
a transparent color film formed by applying a film material in the gap region by an ink-jet
method,
the light-shielding film having gap width regulating sections which narrows the width of
the gap region; and
an active matrix substrate facing the color filter and having switching elements,
wherein the gap width regulating sections are aligned with the switching elements.

22. (Withdrawn) A color filter for a display comprising a plurality of pixels comprising:
a plurality of transparent color stripes, each stripe extending over a plurality of pixels and
comprising film material applied by an ink-jet method; and
an opaque matrix comprising portions which isolate the plurality of transparent color
stripes from each other, said matrix having gap width regulating sections by which widths of the
transparent color stripes are narrowed.

23. (Withdrawn) The color filter as set forth in Claim 22, wherein:
at least one of the gap width regulating section comprises a part of said matrix which
protrudes into the area occupied by a transparent color stripe.

24. (Withdrawn) The color filter as set forth in Claim 22, wherein:
at least one of the gap width regulating sections comprises a part of said matrix located entirely within an area occupied by a transparent color stripe.

25. (Withdrawn) The color filter as set forth in Claim 22, wherein:
at least one of the gap width regulating sections has a corner section, the corner section being round.

26. (Withdrawn) The color filter as set forth in Claim 22, wherein:
a plurality of gap width regulating sections are spaced along a direction in which the transparent color stripes extend,
a gap width regulating section located at an end part of a stripe causing the width of the stripe to be narrower than a gap width regulating section located in a middle part of the stripe.

27. (Withdrawn) The color filter as set forth in Claim 22, wherein:
a plurality of gap width regulation sections are spaced along a direction in which the transparent color stripes extend,
a gap width regulating section positioned further from the middle part of a stripe causing the width of the stripe to be narrower than a gap width regulating section positioned closer to the middle part of the stripe.

28. (Withdrawn) The color filter as set forth in Claim 26, wherein:
a plurality of gap width regulation sections are spaced along a direction in which the transparent color stripes extend,
a gap width regulating section positioned at one end of a stripe causing the width of the stripe to be narrower than a gap width regulating section positioned at the other end; and

the film material is applied beginning from the other end part toward the one end part in the step of applying the film material.

29. (Withdrawn) A method for applying a printing medium to an individual area of a surface, comprising:

positioning within the individual area at least one barrier to flow of the printing medium;
and

applying the printing medium in fluid form to said surface within said individual area.

30. (Withdrawn) A method as in claim 29, comprising applying the printing medium by an ink jet method.

31. (Withdrawn) A method as in claim 29, comprising:

positioning a plurality of barriers to flow of the printing medium within the individual area.

32. (Withdrawn) A method as in claim 31, wherein the respective barriers to flow vary in size.

33. (Withdrawn) A method as in claim 31, wherein the respective barriers to flow vary in configuration.

34. (Withdrawn) A method as in claim 29, wherein said at least one barrier to flow includes an element protruding from the surface.

35. (Withdrawn) A method as in claim 31, wherein said barriers comprise elements protruding from the surface.

36. (Withdrawn) A method as in claim 29, comprising permitting the printing medium to flow around the at least one barrier.

37. (Withdrawn) A method as in claim 31, comprising permitting the printing medium to flow around each of said barriers.

38. (Withdrawn) A method for controlling application of a fluid printing medium to a surface within an individual area, comprising:

applying a fluid printing medium to said individual area; and
positioning within said area at least one barrier to flow of said fluid medium to control the application of said medium.

39. (Withdrawn) A method as in claim 38, wherein said fluid printing medium is applied by an ink jet method.

40. (Withdrawn) A method as in claim 38, wherein said individual area is on a surface, and said barrier comprises an element protruding from the surface to block flow of the fluid printing medium.

41. (Withdrawn) A method as in claim 38, comprising permitting flow of said medium around said barrier.

42. (Withdrawn) A method as in claim 38, wherein said method controls the thickness of the fluid medium applied to respective parts of the individual area.

43. (Withdrawn) A method as in claim 38, comprising providing a plurality of barriers at

respectively different locations within said individual area.

44. (Withdrawn) A method as in claim 43, wherein said respective barriers are of differing size or shape.

45. (Withdrawn) A method as in claim 44, wherein said respective barriers exert different levels of control of fluid flow at said different locations.

46. (Withdrawn) A method as in claim 43, wherein said method controls the thickness of the fluid medium applied to respective parts of the individual area.

X. EVIDENCE APPENDIX

No evidence has been submitted under 37 C.F.R. §§ 1.130, 1.131, or 1.132. No other evidence has been entered by the Examiner and relied upon in this appeal.

XI. RELATED PROCEEDINGS APPENDIX

There are no related proceedings.